

Claims

What is claimed is:

5     1. A liner adapted for use with a container, drawer or shelf to absorb spills of liquids and/or odor control within said container, drawer or on said shelf, said liner comprising a liquid impervious backing layer; and an odor controlling liquid absorbent layer comprising a stabilized matrix of thermoplastic fibers, an absorbent material and an odor controlling material.

10     2. The liner according to claim 1, further comprising a liquid pervious layer wherein the odor controlling liquid absorbent layer is positioned between the liquid pervious layer and the liquid impervious layer.

15     3. The liner according to claim 2, wherein the liquid pervious layer comprises a spunbond layer of polyolefin fibers, said polyolefin fibers further comprising a wetting agent.

20     4. The liner according to claim 1, wherein the absorbent material comprises wood pulp.

25     5. The liner according to claim 1, wherein the odor controlling material is selected from the group consisting of baking soda (sodium bicarbonate), activated charcoal, activated carbon, clays, diatomaceous earths, and zeolites.

6. The liner according to claim 5, wherein the odor controlling material comprises baking soda.

30     7. The liner according to claim 1, wherein the odor controlling liquid absorbent layer comprises a plurality of layers, each layer of the absorbent layer comprising thermoplastic fibers and an absorbent material, wherein at least one of the absorbent layers further comprises the odor controlling material.

8. The liner according to claim 7, wherein the odor controlling liquid absorbent layer comprises two layers, a first layer and a second layer, wherein the first layer is adjacent to the liquid impervious layer, said first layer comprises thermoplastic fibers, an absorbent material and the odor controlling; and the second layer is adjacent to the first layer and is distal to said liquid impervious layer.

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9. The liner according to claim 8, further comprising a liquid pervious layer wherein the first and second absorbent layers are positioned between the liquid pervious layer and the liquid impervious layer.

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10. The liner according to claim 9, wherein the liquid pervious layer comprises spunbond polypropylene, the thermoplastic fibers of the absorbent layers comprise polypropylene, the absorbent material comprises wood pulp, the odor controlling material comprises baking soda and the liquid impervious layer is a polyethylene film.

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11. The liner according to claim 1, wherein the odor controlling liquid absorbent layer is a coform material.

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12. The liner according to claim 11, wherein the coform material comprises about 5% to about 70% by weight of thermoplastic fibers, between about 94% to about 19% by weight of absorbent material and about 0.5% to about 60% by weight of odor controlling material.

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13. The liner of claim 12, wherein the odor controlling material is present in an amount of about 1% to about 40% by weight of the coform material.

14. The liner according to claim 8, wherein the first layer is a coform material comprising thermoplastic fibers in the range of about 30-65% by weight and the absorbent material in the range of about 65-30% by weight and about 1-40% by weight of the odor controlling material; and the second layer is a coform material comprising thermoplastic fibers in an amount of about 10-40% by weight and the absorbent material in the range of about 90-60% by weight.

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15. The liner according to claim 14, wherein the odor controlling material comprises about 5-20% by weight of the total weight of the first and second layers, taking into account the total weight of the odor controlling material, the thermoplastic polymers, and the absorbent material present in both the first and second layer.

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16. The liner according to claim 15, further comprising a liquid pervious layer positioned adjacent to said second layer, distal to said first layer.

10 17. The liner according to claim 16, wherein the liquid pervious layer comprises spunbond polypropylene, the thermoplastic fibers of the absorbent layers comprises polypropylene, the absorbent material comprises wood pulp, the odor controlling material comprises baking soda and the liquid impervious layer comprises a polyethylene film.

15 18. The liner of claim 1, wherein the odor controlling liquid absorbent layer further comprises an ethylene scavenger, an oxygen scavenger, a carbon dioxide scavenger, a fungicide or an antibacterial agent.

20 19. The liner of claim 2, wherein the liquid pervious layer has a point unbonded bond pattern.

25 20. The liner of claim 19, wherein the liquid wherein the liquid pervious layer is prepared from multicomponent fibers.

21. A container comprising the liner of claim 1.

22. A refrigerator comprising the liner of claim 1.

23. A trash receptacle comprising the liner of claim 1.

30 24. A shelf comprising the liner of claim 1, wherein the liner is positioned on an upper surface of the shelf.

25. A drawer comprising the liner of claim 1, wherein the liner is positioned inside the 35 drawer.

26. A method of controlling odor and/or spills of a liquid in a container, drawer or on a shelf, said method comprising placing odor controlling liquid absorbent liner in said container, drawer or on a shelf, an odor controlling liquid absorbent liner

5 comprising

liquid impervious backing layer; and

an odor controlling liquid absorbent layer comprising a mixture of thermoplastic fibers, an absorbent material and an odor controlling material;

wherein the liquid absorbent odor controlling layer is positioned between the liquid

10 pervious outer layer and the liquid impervious backing layer.

26. The method of claim 26, wherein the container is a refrigerator and the liner is placed on an upper surface of a shelf or in a drawer of the refrigerator.

15 27. The method of claim 26, wherein the container is a waste receptacle.

28. A refrigerator liner adapted for absorbing liquids and controlling odor in a refrigerator, said refrigerator liner comprising

a liquid impervious backing layer;

20 a liquid pervious layer comprising a polyolefin containing fiber; and

an odor controlling liquid absorbing layer comprising a stabilized matrix of thermoplastic fibers, an absorbent material and an odor controlling material wherein the odor controlling liquid absorbent layer is positioned between the liquid pervious layer and the liquid impervious layer;

25 wherein said liner is positioned on an upper surface of a shelf in a refrigerator or said liner is positioned in a drawer in the refrigerator.